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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: REMERICQ, MAURICE

SERIAL NO.: 10/047,907

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FILED: January 15, 2002

EXAMINER: BRAHAN, T.J.

TITLE: PROCESS AND A DEVICE FOR THE ON-LINE STORAGE OF SETS OF FLAT PRODUCTS SUCH AS, IN PARTICULAR, DISPOSABLE LINERS OR SANITARY NAPKINS

AMENDMENT "B"

Director of the U.S. Patent
and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

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Sir:

In response to the Office Action of February 18, 2004, having a response being due on May 18, 2004, please amend the above-identified application as follows:

Amendment B: CLAIM AMENDMENTS

Please cancel Claims 1 - 18 and substitute Claims 19 - 36 therefor as follows:

Claims 1-18 (canceled by an earlier amendment).

Claims 19 - 26 (canceled herein).

37. (new) A device for on-line storage of sets of flat products comprising:

an input station;

an output station;

a means for conveying the sets between said input station and said

output station;

a pressing means for moving with said means for conveying, said pressing means for changing from an open configuration permitting an introduction of the sets into said means for conveying at a given input rate, to a holding configuration in which the flat products are pressed against one another;

a means for causing said pressing means to change over from said open configuration to said holding configuration, said means for causing provided at said input station;

a means for ejecting the sets provided at said output station for ejecting the sets at a given output rate; and

a means for generating an accumulation of the sets between said input station and said output station as a function of said rate of input or said rate of output, said means for conveying having a plurality of pods, each of said plurality of pods being capable of accommodating at least one set of the sets of flat products, said pressing means having two carriages slidable toward each other on the pod, said pressing means having a means for holding said two carriages spaced apart by a given distance, said means for holding the carriages comprising first and second blocking means capable of engaging with one another, said first blocking means being secured to said carriage, said second blocking means being articulated in relation to said pod, said means for holding the carriages having a locking means borne by said pod, said locking means for forcing an engagement of said second blocking means with said first blocking means.

38. (new) The device according to Claim 37, said means for conveying moving along a looped path, the device further comprising means for causing said pressing means to change over from said holding configuration to said open configuration provided in a direction of progress of said means for conveying between said output station said input station.

39. (new) The device according to Claim 38, said means for causing said pressing means to change over from said holding configuration to said open configuration being provided in an area of said output station.

40. The device according to Claim 37, said means for causing said pressing means to change over from said open configuration to said holding configuration comprising:

a first jack secured to an armature fixed in relation to which the pod travels, said first jack being capable of acting upon said locking means to disengage said first and second blocking means and leave them free in relation to one another; and

a second jack secured to said armature said second jack being capable of causing said two carriages to slide toward each other between said open configuration and said holding configuration.

41. (new) The device according to Claim 40, further comprising:

means for adapting said product holding configuration to a size of the sets of flat products.

42. (new) The device according to Claim 41, said means for adapting said product holding configuration is comprised by stops that are mobile in relation to said fixed armature, said stops being capable of limiting a travel of said second jack so as to adjust the minimum spacing of said carriages.

43. (new) A device for on-line storage of sets of flat products comprising:

an input station;

an output station;

a means for conveying the sets between said input station and said output station;

a pressing means for moving with said means for conveying, said pressing means for changing from an open configuration permitting an introduction of the sets into said means for conveying at a given input rate, to a holding configuration in which the flat products are pressed against one another;

a means for causing said pressing means to change over from said open configuration to said holding configuration, said means for causing provided at said input station;

a means for ejecting the sets provided at said output station for ejecting the sets at a given output rate; and

a means for generating an accumulation of the sets between said input station and said output station as a function of said rate of input or said rate of output, said means for ejecting comprising a thrust bearing and a means for displacing said thrust bearing in a first direction, said means for displacing comprising means for generating a force in a second direction substantially perpendicular to said first direction and by a means for transmitting said force, said means for generating the force cooperating with said thrust bearing.

44. (new) The device according to Claim 43, in which said means for transmitting the force comprising two arms forming two equal sides of an isosceles triangle, said isosceles triangle having axis of symmetry which is defined by said first direction and by means for bringing together or separating said arms by deforming said triangle while preserving the shape of the isosceles triangle and the orientation of said axis of symmetry.

45. (new) The device according to Claim 44, said arms having ends cooperative with one another in the area of said thrust bearing, said arms having opposite ends mounted so as to be articulated on skids sliding on a rail substantially perpendicular to the axis of symmetry of said isosceles triangle.

46. (new) The device according to Claim 45, said means for generating the force comprising at least one jack driving said skids.

47. (new) The device according to Claim 46, said means for generating the accumulation of sets comprising means for varying a length of the path taken by said means for conveying.

48. (new) The device according to Claim 47, said means for conveying comprising at least one belt forming a loop of a fixed length, said means for varying the length of the path comprising:

a first pair of driving drums drivingly connected to said belt;

a means for actuating said first pair of driving drums; and

a second pair of drums about which said belt travels, the first drum and a second drum of said second pair being respectively provided between the first driving drum and the second driving drum and between the second driving drum and the first driving drum, said first drum and second drum of said second pair being held at a constant distance from one another, said second pair of drums being mobile in relation to said first pair of driving drums.